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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,953

03/19/2004

Tomohiko Yagyu

Y0647.0148

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08/20/2008

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EXAMINER

ABDIN, SHAHEDA A

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

08/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,953	Applicant(s) YAGYU, TOMOHIKO	
	Examiner SHAHEDA A. ABDIN	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The amendment filed on 04/28/2008 has been entered and considered by Examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Imazuku et al. (US Pub. No: 2003/0147645).

(1) Regarding claim 21:

Imazuku teaches an optical network (in Fig.1 and 2) which is formed by a plurality of optical network transmission apparatuses (i.e. nodes, Fig. 1) and a plurality of transmission lines (2A-2D, Fig. 1) that connect the optical network transmission apparatuses (i.e. nodes), characterized in that each optical network transmission apparatus comprises

advertisement means (13, link observation section to flooding section, 14) for autonomously advertising a usable wavelength (utilization of wavelength) in a transmission line connected to the apparatus (i.e. nodes), and

collection means (storage) for autonomously collecting (obtaining) a usable wavelength in a transmission line that is advertised by another apparatus (adjacent nodes), wherein the plurality of optical network transmission apparatuses (i.e. nodes) cooperate together to form a usable path (i.e. optical path) determined (sets by control) from shared information that has been advertised and collected by the optical network transmission apparatuses (nodes) of the network , such that a source apparatus (i.e. starts node) in the determined usable path knows (observed) (see the abstract) , from the shared information it has collected , that the usable path will not fail due to apparatus limitations [0032] (note that the optical network in Fig 1 and 4, comprising a plurality of optical links to transmit signal or wave length components and each of the nodes comprises control for setting path to be used for optical transport; a link observation means observed a wavelength through a link connected to the node as a utilization of the link information, the use purpose of a specific wavelength is determined in advance (0115). Thus, the usable path will not fail due to apparatus limitations.

(2) Regarding claim 22:

Note that the claim limitations are already discussed in claim 21 above, see the discussion in claim 21.

(3) Regarding claim 23:

Note that the claim limitations are already discussed in claim 21 above except the additional limitations “a distributed routing control method in an optical network which is formed by a plurality of optical network transmission apparatuses and a plurality of transmission lines that connect the optical network transmission apparatuses”. However, Imajuku teaches the limitations in such that a distributed routing control method (see in Fig. 28 and 30) in an optical network which is formed by a plurality of optical network transmission apparatuses (nodes) and a plurality of transmission lines (i.e. optical path) that connect the optical network transmission apparatuses (nodes) ([0207-0210]).

(4) Regarding claim 24:

Note that the claim limitations are already discussed in claims 21 and 23 above except the additional limitations “a machine-readable recording medium which records a program of a routing control method”. However, Imazuku teaches the limitation in such that a machine-readable recording medium ((i.e. CPU, or control system includes a memory) which records a program (software) of a routing control method ((0034), and [0252]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milton (US Pub No: 20030170029) in view of Imajuku (US Pub: No: 20030147645).

(1) Regarding claim 1:

Milton teaches (in Fig. 1 and) an optical network which is formed by a plurality of optical network transmission apparatuses (i.e. nodes 4, 5, 6, 7, 8, Fig. 1) and a plurality of transmission lines (i.e. optical fiber) that connect the optical network transmission apparatuses (i.e. nodes) , characterized in that

each optical network transmission apparatus comprises

means (filter or multiplexer and demultiplexer, (fig. 4)) for an addable wavelength (i.e. added band) and a droppable wavelength (i.e. dropped band) in a transmission line connected to the apparatus ([0011], [0014-0016]), and

means (filter or multiplexer and demultiplexer) for an addable wavelength (i.e. added band) and a droppable wavelength (i.e. dropped band) in a transmission line that is by another apparatus (e.g. adjacent nodes), wherein the plurality of optical

network transmission apparatuses (i.e. nodes) cooperate together to form a usable path determined from shared information by the optical network transmission apparatuses of the network ([0011], [0014-0017]),

Note that Milton teaches means for addable and droppable wavelength, but Milton does not clearly disclose (1) an advertisement means for advertising wavelength autonomously and (2) collection means for collecting wavelength autonomously.

However, Imajuku in the same field of endeavor teaches a (1) an advertisement means (13, link observation section to flooding section, 14, Fig. 2) for advertising wavelength (information) autonomously and (2) collection means (storage) for collecting (obtaining) wavelength autonomously ([0034-0035], [0015-0016, [0122], and Fig. 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of a means for advertising and a means for collecting as taught by Imajuku in to the optical transmission system of Milton so that the advertisement means could be used for autonomously advertising a addable and a droppable wavelength in a transmission line connected to the apparatus and a collection means could be used for autonomously collecting an addable wavelength and a droppable wavelength in a transmission that is advertise by another line. In this configuration the system would have an advanced routing capability with optimum optical data transmission in the network apparatus (Imajuku, [0030-0032]).

(2) Regarding claim 2:

Note that Imajuku teaches said advertisement means (e.g. 14, Fig. 2) comprises notification means for notifying another apparatus adjacent to the apparatus (see the Abstract) and a collection means (i.e. 15, Fig. 2) for collecting wavelength in the transmission line ; Milton teaches the addable wavelength and the droppable wavelength in the transmission line connected to the apparatus and the addable wavelength and the droppable (see the discussion in claim 1 above) in the transmission line . Thus, combining the references meet the claim limitations.

(3) Regarding claim 3:

Note that Imajuku teaches the optical network transmission apparatus further comprises route calculation means (i.e. 17, Fig. 2) for calculating a route of an optical path and and a collection means for collecting wavelength in the transmission lines ([0031], [0174]) and [0207-0210] Milton teaches the addable wavelength and the droppable wavelength in the transmission line connected to the apparatus and the addable wavelength and the .droppable wavelength in the transmission line. Thus, combining the references meet the claim limitations.

(4) Regarding claim 4:

Milton teaches the optical network transmission apparatus (nodes , 4, 5, 6, 7, 8, Fig. 1) comprises

wavelength management means (WDM management, or backbone switch, 110, Fig. 13) for managing the addable wavelength and the droppable wavelength in the transmission line connected to the apparatus (nodes) [0076- [0077] , and

wavelength update means (controller or processor) for updating the addable wavelength and the droppable wavelength managed by said , wavelength management means when an optical path is set in the transmission line connected to the apparatus (nodes) [0076-0077].

(5) Regarding claims 5-8:

Note that the claims (5- 8) limitations are already discussed in claim 1-4 respectively. See the discussion in claim 1-4above.

(6) Regarding claim 9:

Note that the claim limitations are already discussed in claim 1 (see the discussion in claim1) . Claim 1 is an apparatus claim and claim 9 is an method claim. The additional limitations “ a distributed routing control method” are recited in claim 9. However, Milton teaches (in Fig. 1) a distributed routing control method ([0067], [0077]).

(7) Regarding claims 10 and 11:

Note that the claim limitations are already discussed in claims 2 and 3. Claims 2 and 3 are an apparatus claim and claims 10 and 11 are a method claim. See the discussion in claims 2 and 3.

(8) Regarding claim 12:

Note that Imajuku teaches the step of setting an optical path along a route obtained by route calculation (i.e. calculation at BL3, Fig. 72) [0016]; and

Milton teaches the step of updating the addable wavelength and the droppable wavelength in the transmission line connected to the apparatus ([0011], [0014-0017]).

Thus combining the references of Milton and Imajuku meet the claim limitations.

(9) Regarding claim 13:

Note that Imajuku discloses a machine-readable recording medium (i.e. CPU, or control system includes a memory [0252]) which records a program (software) distributed routing control method in an optical network transmission apparatuses and a plurality of transmission lines wherein the transmission apparatus comprises capability of autonomously advertising and collecting wavelength (0034) (see ([0154- [0156], and Milton teaches a program execute a process of addable wavelength and droppable wavelength (see 0067) in a transmission line connected to each apparatus (i.e. adjacent

nodes) ([0014-0017], [0076-0077]). Thus combining the references of Milton and Imajuku meet the claim limitations.

(10) Regarding claim 14:

Note that the claim limitations are already discussed in claim 2 and part of 13, see the discussion in claims 2 and 13.

(11) Regarding claim 15:

Note that the limitations are already discussed in claims 2 and part of 13, see the discussion in claims 2 and 13.

(12) Regarding claim 16:

Not that the claim limitations are already discussed in claims 3 and part of claim 13, see the discussion in claims 3 and 13.

(13) Regarding claim 17:

Imajuku teaches said advertisement means (13, link observation section to flooding section, 14) further advertises transmittable wavelengths (λ), and said collection means (storage) further collects (obtained) transmittable wavelengths (i.e. λ) that are advertised by other apparatuses (i.e. adjacent nodes) ([0034-0035], [0015-0016, [0122], and Fig. 4).

(14) Regarding claims 18-20:

Note that the limitations are already discussed in claim 17 see the discussion in claim 17 above.

Response to Arguments

6. Applicant's arguments with respect to claims 1,5,9,13, and 21-24 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendments the references (Milton (US Pub. No: 20030170029 A), and Imajuku (US Pub. No: 20030147645 A1) has been added.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

1. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Shaheda Abdin** whose telephone number is (571) 270-1673.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard HJerpe** could be reached at (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pari-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shaheda Abdin

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/Richard Hjerpe/

Supervisory Patent Examiner, Art Unit 2629

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